CHAPTER 11-55 APPENDIX D

NPDES GENERAL PERMIT
AUTHORIZING DISCHARGES OF TREATED EFFLUENT FROM
LEAKING UNDERGROUND STORAGE TANK REMEDIAL ACTIVITIES

This General Permit is effective on

DEC 0 6 2013

and expires four years from this date,
unless amended earlier.

1. Coverage under this General Permit

   (a) This general permit covers only facilities where petroleum hydrocarbons have been released from underground storage tanks and the cleanup (or remedial action) involves a release or discharge of treated ground water to state waters.

   (b) This general permit covers all areas of the State except for discharges in or to state waters classified by the department as "class 1, inland waters," "class AA, marine waters," and areas restricted in accordance with the State's "No Discharge" policy in chapter 11-54 titled "Water Quality Standards."

2. Limitations on Coverage under this General Permit

   (a) This general permit does not cover the following:

      (1) Discharges of treated ground water into a sanitary sewer system and

      (2) Discharges of treated ground water which initially enter separate storm water

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drainage systems, unless a permit, license, or equivalent written approval is granted by the owner(s) of the drainage system(s) allowing the subject discharge to enter their drainage system(s); except if the permittee is the owner of the drainage system;

(b) The director may require any permittee authorized by this general permit to apply for and obtain an individual permit, in accordance with sections 11-55-34.05 and 11-55-34.10.

3. Term of General Permit

(a) This general permit becomes effective when section 11-55-34.02(b)(3) becomes effective ten days after filing with the office of the lieutenant governor. This general permit expires four years after the effective date or when amendments to section 11-55-34.02(b)(3) are adopted, whichever is earlier.

(b) A notice of general permit coverage under this general permit expires:

(1) Four years after the effective date of this general permit;

(2) When the notice of general permit coverage specifies; or

(3) When amendments to section 11-55-34.02(b)(3) are adopted,

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whichever is earliest, unless the notice of general permit coverage is administratively extended under section 11-55-34.09(d).

4. Notice of Intent Requirements

(a) The owner or its duly authorized representative shall submit a complete notice of intent no later than thirty days before the proposed starting date of the discharge or thirty days before the expiration date of the applicable notice of general permit coverage.

(b) The owner or its duly authorized representative shall include the following information in the notice of intent:

(1) Information required in section 34 of appendix A of chapter 11-55;

(2) List of up to four Standard Industrial Classification codes or North American Industrial Classification System codes that best represent the products or activities of the facility;

(3) Quantitative data on pollutants that the owner or operator of the facility knows or reasonably should know are or will be present in the discharge and for which pollutants numerical criteria for the existing or proposed receiving state waters are specified in section 11-54-4;

(4) Treatment system operations plan which specifies the treatment system to be used and describes its operation in detail.

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If any treatment technology is being considered other than the Granular-Activated Carbon Process or the Air-Stripping Process, then additional technical information on the technology which is consistent with this permit shall be submitted to the director for review as soon as the decision for its use has been made. The treatment system operations plan shall include a contingency plan to be activated in the event of an emergency; provisions for system shut-down and any other measures for the protection of health and safety of employees and the public; a sampling plan; and a detailed schedule for sampling and analysis of the treated groundwater. The treatment system operations plan shall be modified as required by the director. The permittee shall retain the plan, and all subsequent revisions, on-site or at a nearby office.

(5) Certification report certifying the adequacy of each component of the proposed treatment facility along with the associated treatment system operations plan. The certification report shall describe accepted engineering practice of how the process and physical design of the treatment facilities will ensure compliance with this general permit. The signature and professional engineering license number of the design engineer shall be placed on the report. Each report shall also certify that:

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(A) All of the startup and operation instruction manuals for the treatment facility are adequate and available to operating personnel;

(B) All treatment facility maintenance and testing schedules are included in the treatment facility treatment system operations plan; and

(C) Effluent sampling locations and ports are located in areas where samples representative of the waste stream to be monitored can be obtained.

(6) The average and maximum daily flow rates of effluent discharge;

(7) The best estimate of the date(s) on which the facility will begin and terminate the discharge.

(c) The director may require additional information to be submitted.

(d) The owner or its duly authorized representative shall submit a complete notice of intent to the director at the following address or as otherwise specified:

Director of Health
Clean Water Branch
Environmental Management Division
State Department of Health
P.O. Box 3378

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Honolulu, Hawaii 96801-3378

5. Standard Conditions

The permittee shall comply with the standard conditions as specified in appendix A of chapter 11-55. In case of conflict between the conditions stated here and those specified in the standard general permit conditions, the more stringent conditions shall apply.

6. Effluent Limitations and Monitoring Requirements

(a) The effluent shall be limited and monitored by the permittee as specified in this section and in Table 34.2. (Daily maximum effluent limitations for saline water apply only when discharges to saline water occur and daily maximum effluent limitations for fresh water apply only when discharges to fresh water occur.)

(1) Sampling Point

The permittee shall collect representative discharge samples at the nearest accessible point after final treatment and prior to actual discharge or mixing with the receiving state waters.

(2) Collection of Samples

The permittee shall take samples and measurements for the purposes of monitoring which are representative of

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the volume and nature of the total discharge.

(3) Types of Samples

(A) "Grab sample" means an individual sample collected within the first fifteen minutes of a discharge.

(B) "Composite sample" means a combination of at least eight sample aliquots, collected at periodic intervals during the operating hours of the facility over a twenty-four-hour period. The composite shall be flow proportional; either the time interval between each aliquot or the volume of each aliquot shall be proportional to the total effluent flow since the collection of the previous aliquot. The permittee may collect aliquots manually or automatically unless otherwise stated.

(4) Test Procedures

(A) The permittee shall use test procedures for the analysis of pollutants which conform with regulations published under Section 304(h) of the Act.

(B) Unless otherwise noted in this general permit, the permittee shall measure all pollutant parameters in accordance with methods prescribed

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in 40 CFR Part 136, promulgated under Section 304(h) of the Act. The permittee may submit applications for the use of alternative test methods in accordance with 40 CFR §136.4.

(C) The permittee shall use test methods with detection limits that reflect the applicable numerical limitations as specified in chapter 11-54. If the test result is not detectable, indicate that the test result is "less than #," where the # is the lowest detection limit of the test method used.

(5) Recording of Results

The permittee shall comply with section 14(c) of appendix A of chapter 11-55 for each measurement or sample taken under the requirements of this general permit.

(b) Basic Water Quality Criteria and Inspections

(1) The permittee shall not cause or contribute to a violation of the basic water quality criteria as specified in section 11-54-4.

(2) The permittee shall timely inspect the receiving state waters, effluent, and control measures and best management practices to detect violations of and conditions which may cause violations of the basic water quality criteria as

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specified in section 11-54-4. (e.g., the permittee shall look at effluent and receiving state waters for turbidity, color, floating oil and grease, floating debris and scum, materials that will settle, substances that will produce taste in the water or detectable off-flavor in fish, and inspect for items that may be toxic or harmful to human or other life.)

(c) There shall be no visible oil sheen in the effluent.

(d) The permittee shall take all reasonable steps to minimize or prevent any discharge, use, or disposal of sludge or sediments in violation of this general permit or applicable law. Sludge, sediments, or any other material generated by any treatment process must be disposed of in a manner which prevents its entrance into or pollution of any state waters. Additionally, the disposal of such sludge or other material shall be in compliance with 40 CFR Parts 501 and 503.

7. Whole Effluent Toxicity Limitations And Monitoring Requirements

(a) Monitoring Requirements

(1) The permittee shall conduct, or have a contract laboratory conduct, monthly static or flow-through bioassays on composite effluent samples in accordance with the methods described in "Short-term Methods for Estimating the Chronic

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Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (EPA 821/R-02-013, October 2002), and "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms" (EPA 821/R-02-014, October 2002).

(2) Tests shall be conducted in one hundred per cent effluent for a period of ninety-six hours unless the methods specify a shorter period for a definitive test for a particular species (e.g. forty-eight hours for *ceriodaphnia dubia*).

(3) If the permittee uses static tests, the daily renewal solutions shall be fresh twenty-four-hour composite samples. The permittee may conduct tests using locally available species at ambient temperature.

(4) Test results for each species used shall be reported on the permittee's monthly discharge monitoring report form. Results shall be reported as per cent survival with respect to controls.

(5) If necessary, the permittee may adjust the salinity of a discharge using salts to allow testing with marine species.

(b) Species Selection

(1) The permittee shall select three species for monitoring from the EPA manual identified in section 7(a)(1). The Permittee may use *ceriodaphnia dubia*

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(life stage - twenty-four hours) in freshwater only. The permittee shall submit the selection to the director for approval within thirty days after receiving written approval from the director to perform chronic toxicity tests.

(2) The permittee shall obtain written approval from the director before changing any of the three selected species after the initial notification.

(3) The permittee shall conduct monitoring, at a minimum, on one of the three selected species each month. The permittee shall rotate the three selected species on a monthly basis.

(c) Preparation of Initial Investigation Toxicity Reduction Evaluation Workplan

The Permittee shall submit to the director an initial investigation toxicity reduction evaluation workplan (approximately one to two pages) within one hundred twenty days after the issuance date of the notice of general permit coverage, the date the permittee claimed automatic coverage as specified in section 11-55-34.09(e)(2), or the date the facility begins operations. This workplan shall describe steps which the permittee intends to follow in the event that toxicity is detected, and should include at a minimum the following information:

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(1) Description of the investigation and evaluation techniques that would be used to identify potential causes or sources or both of toxicity, effluent variability, treatment system efficiency;

(2) Description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility; and

(3) If a toxicity identification evaluation is necessary, who (e.g., contract laboratory, etc.) will conduct the toxicity identification evaluation.

(d) Additional Toxicity Testing

(1) If toxicity is detected, then the permittee shall conduct six additional weekly tests. Effluent sampling for the first test of the six additional tests shall begin within approximately twenty-four hours of receipt of the test results exceeding a toxicity discharge limitation;

(2) However, if implementation of the initial investigation toxicity reduction evaluation workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the permittee shall conduct only the first test of the six additional tests required above. If toxicity is not detected in this first test, the permittee may return to the

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normal sampling frequency as specified in Table 34.2. If toxicity is detected in this first test, then section 7(e) of this general permit shall apply.

(3) If toxicity is not detected in any of the six additional tests required above, then the permittee may return to the normal sampling frequency as specified in Table 34.2.

(e) Toxicity Reduction Evaluation/Toxicity Identification Evaluation

(1) If toxicity is detected in any of the six additional tests, then, based on an evaluation of the test results and additional available information, the director may determine that the permittee shall initiate a toxicity reduction evaluation, in accordance with the permittee's initial investigation toxicity reduction evaluation workplan and "Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants" (EPA 833-B-99-002, 1999). Moreover, the permittee shall develop a detailed toxicity reduction evaluation workplan which includes:

(A) Further actions to investigate and identify the cause(s) of toxicity;

(B) Actions the permittee has taken or will take to mitigate the impact of the discharge, to correct the

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noncompliance, and to prevent the recurrence of toxicity;

(C) A schedule under which these actions will be implemented;

and shall submit this workplan to the director for approval.

(2) As part of this toxicity reduction evaluation process, the permittee may initiate a toxicity identification evaluation using the test methods manuals, EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA/600/R-92/081 (Phase III), to identify the cause(s) of toxicity.

(3) If a toxicity reduction evaluation/toxicity identification evaluation is initiated prior to completion of the accelerated testing schedule required by section 7(d) of this general permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the toxicity reduction evaluation/toxicity identification evaluation.

(f) Reporting

(1) The permittee shall submit a full report of toxicity test results, including any toxicity testing required by sections 7(d) and 7(e) of this general permit, with the discharge monitoring report for the month in which the toxicity tests are

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conducted. A full report shall consist of: toxicity test results; dates of sample collection and initiation of each toxicity test; and toxicity discharge limitation. Toxicity test results shall be reported according to the test methods manual chapter on report preparation.

If the initial investigation toxicity reduction evaluation workplan is used to determine that additional toxicity testing is unnecessary, these results shall be submitted with the discharge monitoring report for the month in which investigations conducted under the toxicity reduction evaluation workplan occurred.

(2) Within fourteen days of receipt of test results exceeding a toxicity discharge limitation, the permittee shall provide to the director written notification of:

(1) Findings of the toxicity reduction evaluation or other investigation to identify the cause(s) of toxicity;

(2) Actions the permittee has taken or will take, to mitigate the impact of the discharge and to prevent the recurrence of toxicity;

(3) When corrective actions, including a toxicity reduction evaluation, have not been completed, a schedule under which corrective actions will be implemented; or

(4) The reason for not taking corrective action, if no action has been taken.

8. Corrective Action
The permittee shall immediately stop, reduce, or modify the discharge as needed to stop or prevent a violation of the basic water quality criteria as specified in section 11-54-4.

9. Reporting Requirements

(a) Reporting of Monitoring Results

(1) The permittee shall report monitoring results on a discharge monitoring report form (EPA No. 3320-1) or other form as specified by the director. The permittee shall submit results of all monitoring required by this general permit in a format that demonstrates compliance with the limitations in Table 34.2 and other requirements of this general permit.

(2) The permittee shall submit monitoring results obtained during the previous calendar month, postmarked or received by the department no later than the twenty-eighth day of the month following the completed reporting period.

(3) The permittee shall also submit the monitoring results with laboratory reports, including quality assurance/quality control data; effluent flow calculations; and any additional treatment strategies to be implemented based on monitoring results.

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(4) Should there be no discharges during the monitoring period, the discharge monitoring report form shall so state.

(b) Additional Monitoring by the Permittee

If the permittee monitors any pollutant at location(s) designated herein more frequently than required by this general permit, using approved analytical methods as specified in section 6(a)(4)(B) of this general permit, the permittee shall include the results of this monitoring in the calculation and reporting of the values required in the discharge monitoring report form. The permittee shall also indicate the increased frequency.

(c) Reporting of Noncompliance, Unanticipated Bypass, or Upset

(1) The permittee or its duly authorized representative shall orally report any of the following when the permittee or its duly authorized representative becomes aware of the circumstances:

(A) Violation of an effluent limitation specified in Table 34.2 or a basic water quality criteria specified in section 6(b) of this general permit;

(B) Discharge or noncompliance with effluent limitations which may endanger health or the environment; or

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(C) Unanticipated bypass or upset.

(2) The permittee shall make oral reports by telephone to the Clean Water Branch at (808) 586-4309 during regular office hours which are Monday through Friday (excluding holidays) from 7:45 a.m. until 4:15 p.m. or the Hawaii State Hospital Operator at (808) 247-2191 outside of regular office hours.

(3) The permittee shall provide a written report within five days of the time the permittee or its duly authorized representative becomes aware of the circumstances. The written report shall include the following:

(A) Description of the noncompliance, unanticipated bypass, or upset and its cause;

(B) Period of noncompliance, unanticipated bypass, or upset including exact dates and times;

(C) Estimated time the noncompliance, unanticipated bypass, or upset is expected to continue if it has not been corrected; and

(D) Steps taken or plans to reduce, eliminate, and prevent reoccurrence of the noncompliance, unanticipated bypass, or upset.

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(4) The director may waive the written report on a case-by-case basis if the oral report has been received within twenty-four hours.

(d) Planned Changes

The permittee shall report any planned physical alterations or additions to the permitted facility, not covered by 40 CFR §122.41(l)(1)(i), (ii), and (iii) to the director on a quarterly basis.

(e) Reporting of Chemical Uses

The permittee shall submit to the director by the twenty-eighth of January of each year an annual summary of the quantities of all chemicals (including the material safety data sheet), listed by both chemical and trade names, which are used in ground water treatment and which are discharged.

(f) Schedule of Maintenance

The permittee shall submit a schedule for approval by the director at least fourteen days prior to any maintenance of facilities which might result in exceedance of effluent limitations. The schedule shall include a description of the maintenance and its reason; the period of maintenance, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent occurrence of noncompliance.

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10. Submittal Requirements

(a) The owner or its duly authorized representative shall submit signed copies of monitoring and all other reports required by this general permit to the director at the following address or as otherwise specified:

Director of Health
Clean Water Branch
Environmental Management Division
State Department of Health
P.O. Box 3378
Honolulu, HI 96801-3378

(b) The owner or its duly authorized representative shall include the following certification statement and an original signature on each submittal in accordance with section 11-55-34.08(e) or (f):

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

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(c) The owner or its duly authorized representative shall include the notice of general permit coverage file number on each submittal. Failure to provide the assigned notice of general permit coverage file number for this facility on future correspondence or submittals may be a basis for delay of the processing of the document(s).

11. Additional Conditions

The director may impose additional conditions under section 11-55-34.09(b).

12. Record Retention

The permittee shall retain all records and information resulting from the monitoring activities required by this general permit including all records of analyses performed and calibration and maintenance of instrumentation for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation or administrative enforcement action regarding the discharge of pollutants by the permittee or when requested by the director or Regional Administrator.

13. Falsifying Report

Knowingly making any false statement on any report required by this general permit may result in the imposition of criminal penalties as provided for in Section 309 of the Act and in section 342D-35, HRS.

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TABLE 34.2

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DISCHARGE OF TREATED EFFLUENT FROM LEAKING UNDERGROUND STORAGE TANK REMEDIAL ACTIVITIES

Effluent Parameter	Effluent Limitations {1}		Monitoring Requirements	
	For Saline Water	For Fresh Water	Minimum Frequency	Type of Sample
Flow (GPD)	{2}	{2}	Continuous	Calculated or Estimated
Total Petroleum Hydrocarbons as Gasoline (mg/l) {3}	{2}	{2}	Weekly	Grab
Total Petroleum Hydrocarbons as Diesel (mg/l) {3}	{2}	{2}	Weekly	Grab
Benzene (mg/l) {4}	1.7	1.8	Weekly	Grab
Toluene (mg/l) {4}	2.1	5.8	Weekly	Grab
Xylenes (mg/l) {4}	{2}	{2}	Weekly	Grab
Ethylbenzene (mg/l) {4}	0.14	11	Weekly	Grab
Lead (mg/l) {5}	0.14	0.029	Weekly	Grab
Organic Lead (mg/l){6}	{2}	{2}	Weekly	Grab

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Effluent Parameter	Effluent Limitations {1}		Monitoring Requirements	
	For Saline Water	For Fresh Water	Minimum Frequency	Type of Sample
pH (standard units)	{7}		Weekly	Grab {8}
Whole Effluent Toxicity	80% survival in 100% effluent {9}		Monthly	Composite
Toxic Pollutants mg/l {10}	{11}		Annually	{12}

GPD = gallons per day
mg/l = milligrams per liter

NOTES:

{1} Pollutant concentration levels shall not exceed the effluent limits or be outside the ranges indicated in the table. Actual or measured levels which exceed those effluent limits or are outside those ranges shall be reported to the director as required in section(9(c) of this general permit.

{2} The value shall not exceed the applicable limit as specified in chapter 11-54 for the applicable classification of the receiving state waters. If no limitation is specified in chapter 11-54, then the permittee shall monitor and report the analytical result. The department may include discharge limitations specified in section 11-55-19.

{3} The permittee shall use "Test Methods for Evaluating Solid Wastes" (EPA-SW-846-03-03B, November 2004) method 5030/8015 for the measurement

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of Total Petroleum Hydrocarbons as Gasoline and EPA method 3550/8015 shall be used for the measurement of Total Petroleum Hydrocarbons as Diesel.

{4} The permittee shall use "Test Methods for Evaluating Solid Wastes" (EPA-SW-846-03-03B, November 2004), or "Standard Methods for the Examination of Water and Wastewater" (ISBN 0-87553-047-8, 2005;), or EPA methods 5030/8015, or 5030/8021B, or 5030/8260B, or 602, or 624, for the measurement of benzene, ethylbenzene, and toluene. EPA method 8260B, or an equivalent method, shall be used for the measurement of xylenes.

{5} The permittee shall measure for the total recoverable portion of all metals.

{6} The method for measuring for organic lead shall be the one referenced in the State of Hawaii's Technical Guidance Manual for Underground Storage Tank Closure and Release Response (March 2000).

{7} The pH value shall not be outside the range as specified in chapter 11-54 for the applicable classification of the receiving state waters.

{8} The pH shall be measured within fifteen minutes of obtaining the grab sample.

{9} Whole Effluent Toxicity measuring shall be performed in accordance with the provisions of section 7 of this general permit.

{10} The permittee shall measure for toxic pollutants, as identified in Appendix D of 40 CFR Part 122 or in section 11-54-4, only if they are identified as potential pollutants requiring monitoring in the

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notice of intent or as identified by the director. If monitoring results indicate that the discharge limitation was equaled or exceeded, the treatment system operations plan shall be amended to include additional best management practices targeted to reduce the parameter which was in excess of the discharge limitation.

{11} Storm water discharge limitations are the chronic water quality standards established in section 11-54-4, for either fresh or saline waters. For pollutants which do not have established chronic water quality standards, the permittee shall report any detected concentration greater than 0.01 µg/l.

{12} The permittee shall measure for cyanide and the volatile fraction of the toxic organic compounds using a grab sample. The permittee shall measure for all other pollutants, as identified in Appendix D of 40 CFR Part 122 or in section 11-54-4 using a composite sample.

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